From: <u>Bill Jacobs</u>

To: <u>Hebshi, Aaron CTR USAF PACAF 15CES/CEVP</u>
Subject: Re: Rodenticide label considerations

Date: 09/11/2008 01:30 PM Attachments: PR-94-7 9-16-94.pdf

StnList042596.pdf

The label prohibition against making broadcast applications "in areas of human habitation" seems to be intended to keep bait out of places where people live. Such people would include the indigenous population, if any, and other people who live, work, and/or make their homes and have their families on the island. When I was on Wake Atoll last Fall, I saw no signs of families; but there were clear residential areas, including the dorm complexes and the houses occupied by personnel. Although the usual potentials for children and pets to be associated with residential areas are absent on Wake, the labels for the candidate products (e.g., EPA Reg. No. 56228-36, the Brodifacoum-25W product) clearly prohibit broadcast applications to those locations. Where "areas of human habitation" end probably should be assessed by visiting the sites and noting at what point away from living areas the use of the land use/habitat changes from being residential in character. That might be within 30 feet (10 yards) in some locations but clearly not in others (e.g., the central corridor in the dorm area).

As I interpret it, the current label for 56228-36 requires use of tamper-resistant bait stations if bait is to be applied "in areas of human habitation". That would seem to preclude burrow-baiting with that product in such locations. Tree-baiting in residential areas could be effected if tamper-resistant bait stations are used. The criteria for tamper-resistant bait stations were set forth in PR Notice 94-7. I have attached a .pdf version of that document below. Note that a tamper-resistant bait station meeting the criteria may be purchased or constructed and that the list of bait stations appended to the PR Notice is not exhaustive of all suitable units that might be available. The Orange County station added to list when it was revised on 4/25/96 was intended primarily for use to bait roof rats in trees. I do not know whether that station is available for purchase. I examined a prototype when I rated that unit.

Any commensal rodenticide bait registered for structural use (e.g., "in and around buildings") could be used to treat residential areas and other occupied buildings as long is its label does not prohibit use to control species other than those specifically claimed on the label. Labels for structural-use, commensal rodenticide baits tend not to list Polynesian rats as targeted pests. The labels usually list roof rats but not Asian house rats, which probably should be considered a species distinct from the roof rat . The most recent EPA interpretation of the meaning of "around buildings" is within 50 feet of them. Some commensal rodenticide baits permit applications to be made to burrows.

Buildings and building complexes that consist mainly of offices probably should be treated like residential areas, as should the beach houses that are being used. The buildings that are visited occasionally, the shops, the power plant, and other remote outposts probably should be treated with bait stations but I'm not sure that much of a set-back would be needed for broadcasts. Broadcasting bait over large paved areas could create ancillary problems (especially in parking areas and on the runway. The wharf area where barges come in is an area of great concern. Buildings there should be treated with bait stations and with bait being hand-broadcast to non-road areas in its immediate environs. Unoccupied buildings and

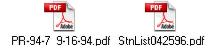
ruins could be treated by aerial broadcast, with some bait maybe being deployed inside the ones that have chambers that would not be reached by the broadcast application.

Bait station applications take more time than broadcast applications to be implemented and to produce maximum effects. It takes time for rodents to locate baits stations, to enter them, and to accustom themselves to feeding from them. With broadcast applications, all that is needed is for rodents to perceive the bait as food and start eating it. Consequently, applications to areas that must be treated with tamper-resistant baits stations should begin well before the broadcast applications so that healthy rodents from residential do not re-invade broadcast-treated areas after the bait is mostly gone.

If the limitations discussed above seem likely to curtail broadcast baiting to the point of jeopardizing the 2-species rat eradication effort on Wake, you might be able to persuade the registrant of the products being considered for use to propose a label amendment that makes it clearer what is meant by "areas of human habitation" or expands the expression to something like "in areas of human habitation where children may be present", which would be less of a problem for programs conducted in locations where all humans present are adults.

There is not much reason to aerial-drop bait on Wake unless there is a high probability for complete eradication to be achieved. Sufficient amounts of bait must reach every rat's home range, so it is important that there be no treatment gaps. Every person on Wake seems to be an adult there by virtue of employment. Presumably, those folks could be assembled for meetings at which the nature of the program could be explained and expectations regarding the various attendees could be outlined. Project personnel will need cooperation and are likely to need assistance in several practical areas (e.g., reporting carcasses, waste management, assisting with moving bait off of paved areas, etc.). From our prior discussions, it's pretty clear that you have been thinking about such matters.

Pre-treatment, it probably would be a good idea to reach firm decisions about the intended fates of the chickens and pigeons on Wake. Their numbers probably are suppressed currently by the presence of rats. Pigeon and chicken populations might expand significantly if they escape or are protected from the effects of the bait and allowed to live freely on the islands post-treatment. In effect, you could have one or both of these bird types in a more prominent role as an invasive species. If the decision is that pigeons and/or chickens are not wanted on Wake, efforts to remove them should precede and overlap the rodenticide treatments.



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